

For Research Use Only

Integrin alpha 1 Polyclonal antibody

Catalog Number: 29042-1-AP

2 Publications



Basic Information

Catalog Number: 29042-1-AP	GenBank Accession Number: BC137121	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 350 ug/ml by Nanodrop;	GeneID (NCBI): 3672	Recommended Dilutions: WB 1:500-1:2000
Source: Rabbit	UNIPROT ID: P56199	IHC 1:300-1:1200
Isotype: IgG	Full Name: integrin, alpha 1	IF-P 1:50-1:500
Immunogen Catalog Number: AG30613	Calculated MW: 1179 aa, 131 kDa	IF-Fro 1:50-1:500
	Observed MW: 180 kDa	

Applications

Tested Applications: WB, IHC, IF-P, IF-Fro, ELISA	Positive Controls:
Cited Applications: WB	WB : HeLa cells, HepG2 cells, rat lung tissue
Species Specificity: human, rat	IHC : human placenta tissue, human tonsillitis tissue
Cited Species: human	IF-P : human placenta tissue,
	IF-Fro : mouse spleen tissue,
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

The integrins are a superfamily of cell adhesion receptors that bind to extracellular matrix ligands, cell-surface ligands, and soluble ligands (PMID: 17543136). They are transmembrane $\alpha\beta$ heterodimers and at least 24 distinct integrin heterodimers are formed by the combination of 18 α and eight β known subunits (PMID: 17543136; 20029421). In addition to mediating cell adhesion, integrins also play important roles in modulating signal transduction pathways that control cellular responses including migration, proliferation, differentiation, and apoptosis (PMID:19118207). Integrin alpha-1 (ITGA1, CD49a) combines with the beta 1 subunit (ITGB1, CD29) to form a cell-surface receptor for collagen and laminin. This receptor is involved in cell-cell adhesion and may play a role in inflammation and fibrosis. Integrin alpha-1 is a transmembrane glycoprotein with an apparent molecular weight of 180-250 kDa, larger than the calculated molecular weight of 131 kDa (PMID: 2475259; 3257425; 11557277; 18840653).

Notable Publications

Author	Pubmed ID	Journal	Application
Mengru Bai	39035165	PeerJ	WB
Binbin Li	35950911	Development	WB

Storage

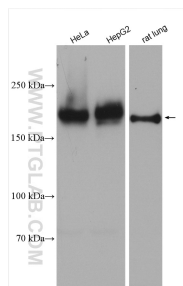
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

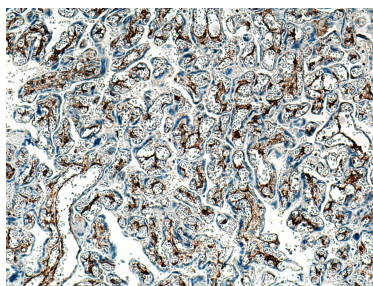
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

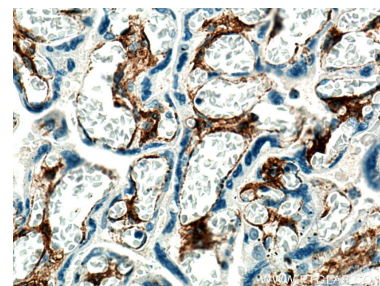
Selected Validation Data



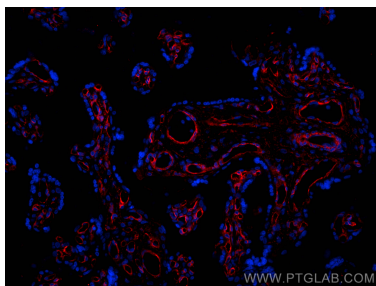
Various lysates were subjected to SDS PAGE followed by western blot with 29042-1-AP (Integrin alpha-1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



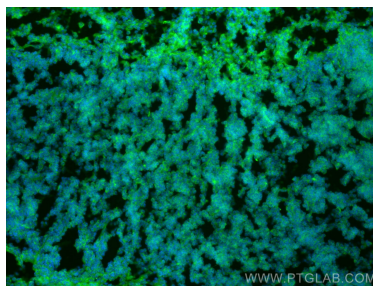
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 29042-1-AP (Integrin alpha-1 antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 29042-1-AP (Integrin alpha-1 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using Integrin alpha-1 antibody (29042-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse spleen tissue using Integrin alpha-1 antibody (29042-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).